

priate anti-infective agent. While topical steroids may help to reduce pruritus and inflammation, they should never be the first line of therapy directed at the infection itself.

Relative contraindications include *Candida* and dermatophytes—because these organisms grow well on macerated skin, the use of a topical steroid in conjunction with an appropriate anti-infection agent may occasionally be appropriate; herpes simplex and zoster—customary treatment must be directed at the virus itself, but some physicians use a mild- to mid-strength topical steroid to reduce the burning and itching of these disorders and even intralesional steroids in an attempt to reduce the risk of postherpetic neuralgia in patients with zoster. Extreme caution must be used when topical steroids are applied to the face.

Potent and superpotent agents—betamethasone dipropionate (Diprolene), clobetasol propionate (Temovate) and diflorasone diacetate (Psorcon)—have a higher propensity to cause topical side effects such as atrophy, stria, purpura or even ulceration, particularly when used in thin-skin areas (periorbital and groin regions), under occlusion or in a pediatric patient. Acnelike eruptions—rosacea, perioral dermatitis—may occur on the face with virtually any topical steroid. Glaucoma has been implicated in many topical agents used around the eyes.

Practitioners must be aware that package inserts for some superpotent agents warn against the use of occlusion or in pediatric patients and require a “rest” period after two weeks of use to reduce the risks of topical and systemic side effects, especially adrenal suppression.

ROGER C. CORNELL, MD
La Jolla, California

REFERENCES

- Cornell RC, Stoughton RB: The use of topical steroids in psoriasis. *Dermatol Clin* 1984 Jul; 2:397-409
Hradil E, Lindstrom C, Moller H: Intermittent treatment of psoriasis with clobetasol propionate. *Acta Derm Venereol (Stockh)* 1978; 58:375-377
Marks R: Methods for the assessment of skin atrophogenicity of topical corticosteroids. *Dermatologica* 1976; 152(suppl):117-126
Olsen EA, Cornell RC: Topical clobetasol-17-propionate: Review of its clinical efficacy and safety. *J Am Acad Dermatol* 1986 Aug; 15(Pt 1):246-255

Bowenoid Papulosis

BOWENOID PAPULOSIS is a unique and distinctive neoplasm of the genitoanal region recently shown to be virally induced. Known by this name and several others over the past 30 years, the condition has been unified by histopathologic changes similar to squamous cell carcinoma in situ (Bowen's disease).

Bowenoid papulosis primarily affects sexually active young adults and appears clinically as multiple skin-colored or pigmented papules on a circumcised penile shaft or labia majora and minora, but it may occur anywhere in the genitoanal region. The papules may be discrete, grouped, linear, confluent, smooth or verrucous in morphologic appearance and texture. They are usually asymptomatic but occasionally itch. Macular and leukoplakia-like lesions have been described.

The differential diagnosis includes warts, condyloma acuminatum, seborrheic keratoses, nevi, lichen planus and other papular conditions. Generally the larger red patches and plaques of Bowen's disease and erythroplasia of Queyrat are not confused with Bowenoid papulosis.

On histopathologic examination, however, Bowenoid papulosis bears a remarkable similarity to the atypia of Bowen's disease, with only minimal differentiating features. Because of this potential confusion and unawareness of the

existence of Bowenoid papulosis, unnecessary ablative procedures have been done in the past.

The natural history of this condition ranges from spontaneous regression over a period of months to rarely evolving into invasive squamous cell carcinoma. Without treatment, most remain benign and unchanged.

Prior suspicions of a viral cause have been confirmed by the identification of human papillomavirus (HPV) type 16. Other recent studies have linked Bowenoid papulosis with HPV 16-induced cervical dysplasia and neoplasia. There is growing evidence that this disease is sexually transmitted, thus raising many new concerns regarding an otherwise benign process.

Therapeutic modalities that have been advocated include topical application of retinoic acid or 5-fluorouracil, cryotherapy, electrodesiccation with or without curettage, shave biopsy, surgical excision, vaporization by laser and interferon injection. Clinicians should use selective judgment in choosing an appropriate conservative modality, as some cases spontaneously regress and malignant degeneration is rare. Because recurrence of Bowenoid papulosis is frequent, a biopsy should be taken of lesions recalcitrant to standard therapy to exclude malignancy.

In view of assumed sexual transmission and a proven association with cervical neoplasia, our emphasis should be on prevention. A patient with Bowenoid papulosis should be thoroughly educated regarding HPV infections and the use of condoms (or abstinence) strongly advocated. Patients should be routinely examined for recurrence. Female patients or sexual partners of male patients with this disorder should be followed with regular cytologic, colposcopic and histologic examinations.

DAVID A. SOUTH, MD
Freedom, California

REFERENCES

- Gross G, Hagedorn M, Ikenberg H, et al: Bowenoid papulosis—Presence of human papillomavirus (HPV) structural antigens and of HPV 16-related DNA sequences. *Arch Dermatol* 1985 Jul; 121:858-863
Obalek S, Jablonska S, Beaudenon S, et al: Bowenoid papulosis of the male and female genitalia: Risk of cervical neoplasia. *J Am Acad Dermatol* 1986 Mar; 14:433-444
Wade TR, Kopf AW, Ackerman AB: Bowenoid papulosis of the genitalia. *Arch Dermatol* 1979 Mar; 115:306-308

Cutaneous Manifestations of the Acquired Immunodeficiency Syndrome (AIDS) and AIDS-Related Conditions

INFECTION BY THE HUMAN IMMUNODEFICIENCY VIRUS (HIV) and subsequent depletion of immune function may involve a variety of organs in the acquired immunodeficiency syndrome (AIDS) and AIDS-related conditions (ARC). The skin as a mirror of internal disease provides a readily accessible diagnosis of AIDS or ARC in many cases.

Viral and fungal infections of unusual severity were recognized early on as harbingers of AIDS or ARC. Other infectious agents occurring as unusual skin lesions have been reported recently. Herpes simplex virus, *Cryptococcus neoformans*, *Histoplasma capsulatum* and *Mycobacterium avium-intracellulare* may appear as skin ulcers, vesicles or granulomas. Herpes simplex virus in particular may cause severe, chronic perirectal ulcerations and abscesses. Mucosal infections with *Candida albicans* usually present as white patches in the buccal and oropharyngeal areas. Hairy leukoplakia—white roughened areas along the sides of the tongue—has recently been linked with the Epstein-Barr virus and occasionally *Candida*, herpes and human papillomavirus.